

TEXTURE ROAMING VIA DIMENSION ELEVATION

ABSTRACT OF THE DISCLOSURE

The present invention provides texture roaming via dimension elevation. A degree elevated texture is used to contain level of detail (LOD) levels (or tiles) of a clip-map across a degree elevated coordinate space. For example, a three-dimensional (3D) texture is used for two-dimensional (2D) clip-mapping, a four-dimensional (4D) texture is used for 3D clip-mapping, and a 2D texture is used for one-dimensional (1D) clip-mapping. Once the levels of a clip-map are placed in an extra dimension coordinate space, the extra dimension texture coordinate value can be computed based on clip-mapping rules.